

## **Michigan Water Resources Conservation Advisory Council**

### **January 6, 2009, Meeting Summary**

The Michigan Water Resources Conservation Advisory Council (WRCAC) meeting was held on Tuesday January 6, 2009, in the Ballroom on the lower level of the University Center from 10:00 am to 3:00 pm

Council members in attendance were Sumedh Bahl, Dr. Bryan Burroughs, James Clift, Jon Coleman, Frank Ettawageshik, Michael Gregg, Jo Latimore, Mark Lemons, Peter Manning, Timothy Neumann, Michael Newman, Scott Piggott, Frank Ruswick, Dr. Paul Seelbach, Dr. Pat Soranno, Donna Stine, and Bob Walther. Absent members were Jon Allan, Craig Hoffman, Richard Slevatz, and Samuel Wendling. Guests present were Jim Cleland, Abby Eaton, Greg Fox, Pat Fouchey, Fred Goldberg, Dave Hamilton, Rita Jack, Jim Nicholas, Bob Pigg, and Mark Swartz.

#### **Welcome – Review of Minutes – Review of agenda and goals for the day**

At 10:10 James Clift welcomed everyone to the meeting. James Clift asked if everyone had the 3 page draft report titled: Water Resources Conservation Advisory Council; Report on Capacity and Actual Withdrawals Draft January 5, 2009. Copies were provided for the guests present – copy of document listed at Attachment 1.

James Clift then reviewed the agenda. James Clift asked if there were any additions / changes. There were none.

The committee as a whole approved the Summary of the December 2 WRCAC Meeting. The meeting summary is to be posted on the web as written.

James Clift stated that on February 8 a progress report is due. The document titled: Water Resources Conservation Advisory Council Report Responsibilities Section 32803 of NREPA (copy of document listed as Attachment 2) that was sent out yesterday refers to what is being requested. James Clift then reviewed the upcoming report schedule. On January 9 the recommendations on capacity vs use is due. On April 9 the tool report is due. On February 8 a progress report is due with a final report due by April 9.

The council asked Frank Ruswick about the December 3<sup>rd</sup> briefing. Frank Ruswick said Senator Patricia L. Birkholz had requested a demonstration at the Senate Natural Resources and Environmental Affairs Committee on the functionality of the assessment tool. Since it was at the tail end of the session the meeting focused on demonstrating the water assessment tool. There were some technical difficulties but felt the demonstration went well.

James Clift asked all present to introduce themselves.

Mike Newman of the Michigan Aggregates Association was thanked for hosting the meeting.

### **Finalize Report of the Capacity vs Actual Use Subcommittee**

Mike Gregg said yesterday afternoon the Executive Committee met. It had about an hour of discussion on the Water Resources Conservation Advisory Council Report on Capacity and Actual Withdrawals. Mike Gregg said, "As done yesterday let us go through the document paragraph by paragraph." Scott Piggott turned on his laptop and projected the document onto a screen. Scott Piggott updated the report as grammatical errors, suggestions and changes were made. The discussion went from 10:20 till 11:55.

### **Lunch**

Thanks to Mike Newman of the Michigan Aggregates Association members went upstairs to the upper level dining room for a buffet lunch.

### **Report of Subcommittees**

James Clift reconvened the meeting at 12:50. James Clift said even though the review of the report took longer than expected, it was well worth putting our time into it. We will now have the other two subcommittees give updates.

### **Surface Water Protections**

Dr. Pat Soranno said a document was distributed titled: Michigan Water Resources Conservation Advisory Council Subcommittee to Evaluate Impacts on Inland Lakes, Wetland and Great Lakes Interim Report – WORKING DRAFT December 30, 2008 (copy of document listed as Attachment 3) to all council members with the agenda. The first point says we will be considering lakes and wetlands not addressing the Great Lakes; currently. The second point lists possible types of changes in response to water withdrawals. The two this subcommittee thinks will be the easiest to use are listed. The third and fourth points go together: the classification of lakes and wetlands. There are many wetlands classifications. We will have to choose one. At this time there are no classifications for lakes. Point 5 states fish will not be an appropriate indicator. The subcommittee is still in discussion for appropriate indicators. Will need to research what is available.

Questions: are Great Lakes considered lakes. Frank Ruswick read the statute: Study and make recommendations on whether and how the definition of adverse resource impact in section 32701 should be modified to more specifically address potential impacts to the Great Lakes, inland lakes, and other aquatic systems due to large quantity withdrawals.

(The Next Inland Lakes Subcommittee meeting will be on January 23, 1-3pm, at MUCC)

### **Assessment Tool Evaluation – Dr. Paul Seelbach**

Paul Seelbach said working on having final maps done. They are in final review. Very close to being done. Dave Hamilton & I are doing the final review. Having the final maps will allow testing via site specific data.

Since the Tool has been up and running, there has had about 350 hits per month. 38% are returning users. The Tool is getting a steady audience. Only about 28 comments submitted. Twenty-four about the operations of the interface. We recognize there are problems and ongoing programming is needed. Polishing the Tool will go on for awhile. Users who have commented have given helpful insight since they are commenting from a user point giving us a different prospective. We will put on-line all questions with answer. You can view the Tool at <http://www.miwwat.org/>

Paul Seelbach said the Workshop program is going well; thanks to the extension. They made it a priority. Had three workshops in 2008. Two more are planned. By tomorrow should have dates for the other four workshops. Paul Seelbach said MSU is doing a super job of teaching.

On January 19 a workshop will be given in Lenawee County. On January 22 a workshop will be giving in Ottawa County. At this time the Ottawa County workshop has very few registrants. If you know of users in that area please inform them of this workshop. Information is available at <http://www.iwr.msu.edu/> click on Introduction to Michigan's New Water Withdrawal.

The subcommittee came up with a standard questionnaire. Have had 60 responses. Very positive responses. With a high rating of 5, average response is 4. Paul Seelbach said he is very pleased with the high marks the Tool has gotten. .

James Clift asked about the Executive Order on budget cuts. Paul Seelbach said future programs are educational. No cuts to Dave Lusch's program. Frank Ruswick said funding requests for 2009 were cut slightly. Not yet sure for 2010.

Paul Seelbach went on to say another prong of outreach is a webinar. MSU will use it this Friday to education all extension folks. Hoping this approach will work with those areas that will not have a workshop.

**Review of components of the February 8, 2009, progress report, Discussion of component – define scope of work, Assign members to finalize section.**

James Clift asked everyone to refer to their copy of: Water Resources Conservation Advisory Council Report Responsibilities Section 32803 of NREPA.

James Clift said 3c & 3d were covered in the morning session.

Now at 3 e: Make recommendations on reconciling conflicts in state laws related to the use of the waters of the state. The Law Conflicts Committee will consist of James Clift and Mike Gregg. Jon Allan and Peter Manning will be asked to join the committee.

At 1:50 a discussion on 3f (Make recommendations on the development and implementation of the state's water conservation and efficiency program under section 4.2 of the compact.) started. The Conservation Committee will consist of Sumedh Bahl and Jim Cleland. (Mark Lemons volunteered for this committee 1-7-2009.)

At 1:55 a discussion on 3g (Develop a framework for evaluating preventative measures designed to prevent adverse resource impacts.) started.

Mike Newman said he worked with Jon Allan when the GWCAC was active. They brought in some outside advisors – some paid. There is an addendum posted on GWCAC webpage ([www.michigan.gov/deqgwccac](http://www.michigan.gov/deqgwccac)) titled: [Adverse Resource Impact Mitigation Framework](#) . It is the Framework proposed by the GWCAC Mitigation Subcommittee. The framework was never fully discussed during the Council's tenure.

The Preventative Measures Committee will consist of Bryan Burroughs, Jo Latimore, Mike Newman and Bob Walther. Jon Allan will be invited.

At 2:30 a discussion on 3h (In consultation with academic institutions and other nonprofit organizations, make recommendations regarding educational materials related to the use and availability of water resources.) started. The Educational Materials Committee will consist of Jon Coleman, Jo Latimore, and Timothy Neumann. Craig Hoffman will be invited.

**Establish timelines for draft documents**

By Friday January 16 draft due to Executive Committee.

By January 26<sup>th</sup> Executive Committee will review and distribute to entire council.

By Friday January 30 Council should give comments back to Executive Committee.

By Wednesday February 4 Executive Committee will incorporate working draft and redistribute to council.

Friday February 6 during the WRCAC Meeting at Central Michigan University in the Staff Lounge (Room 337) of the Park Library at 300 East Preston Road in Mount Pleasant will be the final review.

**Next Meeting**

The February 6, 2009, Meeting will be at the Charles V Park Library on the Central Michigan University Campus at 300 East Preston Road in Mt. Pleasant, Michigan, from 10:00 am to 3:00 pm hosted by Central Michigan University and James Clift.

## Attachment 1

### Water Resources Conservation Advisory Council Report on Capacity and Actual Withdrawals

**Charge:** Section 32803(4)(a) of the Natural Resources Environmental Protection Act requires the Water Resources Conservation Advisory Council (WRCAC) to “not later than 6 months after the effective date of the amendatory act that added this subdivision, study and make recommendations...on how the assessment tool could be updated to reconcile differences between baseline capacity and actual withdrawal amounts to assure the accuracy of the assessment tool’s determinations.”

**Problem Statement:** Today’s water use assessment tool—and more broadly, the underlying water withdrawal assessment process—is built upon the predicted effect of new withdrawals on stream flow. The assessment process estimates the impact of a future water use on a stream. The models that form the base of the process account for the effect of an existing water withdrawal in the affected stream’s index flow determination. However, existing uses are “grandfathered” for their full withdrawal capacity even though only the amount of their current use is reflected in an index flow determination. An increase in these grandfathered withdrawals over current use would cause a reduction in stream flow that would not be accounted for in the assessment process. Thus, a grandfathered water user can increase use over current capacity, and alone or in combination with new withdrawals, cause in an adverse resource impact. As a result, the assessment process could under certain circumstances underestimate predicted future impacts because it fails to take into account for this potential increased withdrawal by grandfathered uses.

On the other hand, there is a corollary capacity/use issue for new withdrawals that could have the opposite effect. For new uses, the current system accounts for the entire capacity of a new withdrawal, assuming the immediate corresponding reduction in flow. However, it is uncertain whether withdrawal to full capacity—and hence actual reduction in flow—will ever occur and, if so, when. Thus, the assessment process could overestimate potential future impacts, precluding new withdrawals by other users unless it can consider and reduce the uncertainty surrounding the timing and extent of the actual flow reduction caused by a new withdrawal.

**Recommendation:** The WRCAC recognizes the above as conceptual issues within the structure of the water withdrawal assessment process. However, we do not yet have sufficient information concerning withdrawals or experience with the assessment process to evaluate the scope or magnitude of those issues. That is, we cannot yet assess where and how frequently these issues will have real world impacts, or how large these impacts will be. As a result, we recommend the following:

1. The WRCAC should evaluate and report on necessary improvements to the data systems underlying the assessment process. The Departments of Environmental Quality (DEQ), Agriculture (MDA), and Natural Resources (DNR) are reviewing these data systems and intend to update them to the extent possible within available resources. These efforts include:
  - Improving data integration between the MDA and DEQ, so that information gathered provides an improved basis for future decisions under the water assessment process.
  - Reviewing existing registration and reporting information to identify data gaps that need to be filled to fully understand and track registered capacity and reported actual use. Some of these gaps include unreported water users, the lack of precise surface water withdrawal location data, insufficient return- flow data, the absence of a standardized calculation of withdrawal capacity/use, and a means to capture the discontinuation of registered withdrawals so that they can be accounted for by the assessment tool.
  - The WRCAC recommends that the statute be amended to have water users more accurately report the location of surface water withdrawals. Specifically, surface water withdrawal location information should be to the same standard as for groundwater withdrawals in Sec. 32707(1)(e), the latitude and longitude with the accuracy of the reported location data within 25 feet.The WRCAC should evaluate the results of these efforts and recommend any further actions, and the resources necessary to support them, to improve the assessment process.
2. The WRCAC should improve understanding of the grandfathered capacity/use issue by studying specific areas. These “pilot areas” will be selected based on the potential that expanded grandfathered use will impact the resource (e.g., a transitional stream with multiple withdrawals), quality of existing data, and other appropriate factors. The effort will focus on identifying and filling data gaps, estimating the effect of changes in grandfathered withdrawals and new withdrawals on stream flow, and identifying opportunities for data management, tracking, and other solutions to resolve the issue. To the extent possible, the knowledge derived from this effort will be applied throughout the state.
3. The WRCAC should monitor capacity/use issues under the current law and the DEQ’s exercise of existing authority to address the issue in individual cases using the site-specific review process and its ability to conditionally authorize a withdrawal based on current capacity, use and return- flow parameters. Similarly, water user committees may successfully moderate the effects of capacity/use discrepancies by addressing problems arising at specific sites. The WRCAC should evaluate and summarize the opportunities and limitations for addressing capacity/use issues under the current law.
4. The WRCAC should update this report to the Legislature no later than January, 2010.

## Attachment 2

### Water Resources Conservation Advisory Council Report Responsibilities Section 32803 of NREPA

- 1) By January 9, 2009: Study and make recommendations on how the assessment tool could be updated to reconcile differences between baseline capacity and actual withdrawal amounts to assure the accuracy of the assessment tool's determinations.
- 2) By April 9, 2009: Conduct testing and evaluate the operation and the accuracy of the assessment tool, including implications of section 32706e [phase-in provision], submitting a report that contains the results of its testing and evaluation and any recommendations that the council has to improve the operation of the assessment tool.
- 3) Issue a Progress report by February 8, 2009 and final report by August 9, 2009 as required under MCLA 324.32803(4), subsection:
  - c) Study and make recommendations regarding the development and refinement of the assessment tool.
  - d) Study and make recommendations on whether and how the definition of adverse resource impact in section 32701 should be modified to more specifically address potential impacts to the Great Lakes, inland lakes, and other aquatic systems due to large quantity withdrawals.
  - e) Make recommendations on reconciling conflicts in state laws related to the use of the waters of the state.
  - f) Make recommendations on the development and implementation of the state's water conservation and efficiency program under section 4.2 of the compact.
  - g) Develop a framework for evaluating preventative measures designed to prevent adverse resource impacts.
  - h) In consultation with academic institutions and other nonprofit organizations, make recommendations regarding educational materials related to the use and availability of water resources.
- 4) By August 8, 2011, provide a report with recommendations regarding how the water withdrawal assessment process under part 327 could be improved in order to more accurately assess adverse resource impacts. The report shall contain specific recommendations on the use of the assessment tool, the site-specific review process, the permitting process, and any other measure that the council determines would improve the water withdrawal assessment process.

## **Attachment 3**

### **Michigan Water Resources Conservation Advisory Council Subcommittee to Evaluate Impacts on Inland Lakes, Wetland and Great Lakes**

#### **Interim Report – WORKING DRAFT**

December 30, 2008

Points that the subcommittee has agreed on:

1. We will consider impacts from water withdrawals on lakes (broadly defined) and wetlands (as ‘other water bodies’), although exactly which wetlands to be considered are still under discussion (i.e. whether we consider all wetlands or specific sensitive types).
2. We will consider two possible types of changes to lakes and wetlands in response to water withdrawals:
  - a. Change in water level (ie. water surface area) of the water body
  - b. Change in the % contribution of GW into the water body
3. For lakes -- We need to develop a lake classification that puts lakes into classes that will respond ‘similarly’ to water withdrawals (e.g. changes in water level or % GW).
4. For wetlands -- We will use an existing wetland classification if possible (TBD) for the same purposes as in (3).
5. Fish are likely not an appropriate indicator for assessing adverse resource impacts in either lakes or wetlands.

An additional paragraph will provide an overview of progress to date.